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(54) **Gas discharges having emission in the UV-A range and fluorescent lamps incorporating same**

(57) A mercury-free EM radiation source comprises excited oxygen-, nitrogen-, or carbon-containing radicals emitting radiation in the wavelength range from about 254 nm to about 410 nm. A light source comprises such an EM radiation source and at least a photoluminescent

material that is capable of being excited by the EM radiation emitted by the source, and emitting EM radiation in the visible wavelength range.

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## EUROPEAN SEARCH REPORT

Application Number  
EP 05 25 5050

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                      |                                                   |                                         |
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| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Citation of document with indication, where appropriate, of relevant passages                                        | Relevant to claim                                 | CLASSIFICATION OF THE APPLICATION (IPC) |
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| Place of search<br>The Hague                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                      | Date of completion of the search<br>17 April 2009 | Examiner<br>Stavroulis, Stefanos        |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>.....<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                      |                                                   |                                         |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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